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(54) HYDROCARBON COMPOUND AND ORGANIC ELECTROLUMINESCENT ELEMENT

(57)Abstract:

PROBLEM TO BE SOLVED: To obtain the subject element excellent in luminous efficiency and capable of emitting light at a high luminance by sandwiching a layer containing a specific compound between a pair of electrodes.

SOLUTION: This element is obtained by sandwiching a layer containing 12,12'-biacenaphtho[1,2-b]triphenylene derivative between a pair of electrodes. A new compound represented by the formula (X1 to X30 are each H, a halogen or the like) such as 9, 9',16,16'-tetraphenyl-12,12'-biacenaphtho[1,2-b] triphephenylene is preferred as the 12,12'-biacenaphtho[1,2-b]triphenylene derivative. The compound represented by the formula is prepared by reacting an acenaphtho[1,2-b]triphenylene derivative, e.g. 12-bromo-9,16-diphenylacenaphtho[1,2-b]triphenylene in the presence of nickel chloride, triphenylphosphine and zinc. When the above derivative is used as a luminous component in a luminous layer, an organic electroluminescent element excellent in durability and emitting blue light at a high luminance is preferably obtained.

